SEQUENCE LISTING <110> IMHOF, BEAT ALBET

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JUN 2 1 2001

TECH CENTER 1600/2900

AURRAND-LIONS, MICHEL

1,20> VASCULAR ADHESION MOLECULES AND MODULATION OF THEIR FUNCTION

<130> 11422/0264679 <140> 09/\(\dag{24,531} <141> 2000\03-13 <150> EP 99.200746.8

<160> 21

<170> PatentIn Ver.

<151> 1999-03-\(\frac{1}{4}\)1

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: primer

<220>

<221> modified_base

<222> (6)

<223> a, t, c, g, other or unknown

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<221> modified base

<222> (10)..(12)

<223> a, t, c, g, other or unknown

<400> 1

tayagntgyn nngcytcyaa

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<220>

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<222> (10)..(12)

<223> a, t, c, g, other or unknown

<400> 2

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20

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 <223> a, t, c, g, other or unknown
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 taytaytgyn nngcytcyaa
                                                                      20
 <210> 4
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<223> Description of Artificial Sequence: primer
<400> 4
gaggtacttg catgtgct
                                                                     18
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<211> 19
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<213> Artificial Sequence
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<223> Description of Artificial Sequence: primer
<400> 5
cgacaggtgt cagataaca
                                                                     19
<210> 6
<211> 16
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: primer
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caccctcctc actcgt
                                                                     16
<210> 7
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<212> DNA
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       for detection of JAM-2 transcript
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                                                                     18
 <210> 8
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       for detection JAM-2 transcript
 <400> 8 -
 caccctcctc actcgt
                                                                     16
 <210> 9
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<223> Description of Artificial Sequence: primer for
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<400> 9
gttggataca ggccagactt tqttq
                                                                    25
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gagggtaggc tggcctatag gct
                                                                    23
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<212> DNA
<213> Mus musculus
<400> 11
cagacattcc cetegacatg gegetgagec ggeggetgeg aettegactg taegegegge 60
tgcctgactt cttcctgctg ctgctcttca ggggctgcat gatagaggca gtgaatctca 120
aatccagcaa ccgaaaccca gtggtacatg aatttgaaag tgtggaattg tcttgcatca 180
ttacggactc acagacaagt gaccctagga ttgaatggaa gaaaatccaa gatggccaaa 240
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<210> 12 <211> 1631 <212> DNA

<213> Mus musculus

<400> 12

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<210> 13

<211> 310

<212> PRT

<213> Mus musculus

<400> 13

Met Ala Leu Ser Arg Arg Leu Arg Leu Arg Leu Tyr Ala Arg Leu Pro
1 5 10 15

His Phe Phe Leu Leu Leu Phe Arg Gly Cys Met Ile Glu Ala Val 20 25 30

Asn Leu Lys Ser Ser Asn Arg Asn Pro Val Val His Glu Phe Glu Ser

Val Glu Leu Ser Cys Ile Ile Thr His Ser Gln Thr Ser Asp Pro Arg
50 55 60

Ile Glu Trp Lys Lys Ile Gln Asp Gly Gln Thr Thr Tyr Val Tyr Phe
65 70 75 80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Thr Asp Val Phe Gly
85 90 95

Lys Thr Ser Leu Arg Ile Trp Asn Val Thr Arg Ser Asp Ser Ala Ile
100 105 110

Tyr Arg Cys Glu Val Val Ala Leu Asn Asp Arg Lys Glu Val Asp Glu
115 120 125

Ile Thr Ile Glu Leu Ile Val Gln Val Lys Pro Val Thr Pro Val Cys
130 135 140

Arg Ile Pro Ala Ala Val Pro Val Gly Lys Thr Ala Thr Leu Gln Cys 145 150 155 160

Gln Glu Ser Glu Gly Tyr Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn 165 170 175

Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Gln Asn 180 185 190

Ser Ser Phe His Val Asn Ser Glu Thr Gly Thr Leu Val Phe Asn Ala 195 200 205

Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp 210 215 220



Ala Gly Ala Ala Arg Cys Glu Gly Gln Asp Met Glu Val Tyr Asp Leu 225 230 235 240

Asn Ile Ala Gly Ile Ile Gly Gly Val Leu Val Val Leu Ile Val Leu 245 250 255

Ala Val Ile Thr Met Gly Ile Cys Cys Ala Tyr Arg Arg Gly Cys Phe 260 265 270

Ile Ser Ser Lys Gln Asp Gly Glu Ser Tyr Lys Ser Pro Gly Lys His
275 280 285

Asp Gly Val Asn Tyr Ile Arg Thr Ser Glu Glu Gly Asp Phe Arg His 290 295 300

Lys Ser Ser Phe Val Ile 305 310

<210> 14

<211> 298

<212> PRT

<213> Mus musculus

<400> 14

Met Ala Arg Ser Pro Gln Gly Leu Leu Met Leu Leu Leu Leu His Tyr
1 5 10 15

Leu Ile Val Ala Leu Asp Tyr His Lys Ala Asn Gly Phe Ser Ala Ser

Lys Asp His Arg Gln Glu Val Thr Val Ile Glu Phe Gln Glu Ala Ile
35 40 45

Leu Ala Cys Lys Thr Pro Lys Lys Thr Thr Ser Ser Arg Leu Glu Trp

Lys Lys Val Gly Gln Gly Val Ser Leu Val Tyr Tyr Gln Gln Ala Leu 65 70 75 80

Gln Gly Asp Phe Lys Asp Arg Ala Glu Met Ile Asp Phe Asn Ile Arg

Ile Lys Asn Val Thr Arg Ser Asp Ala Gly Glu Tyr Arg Cys Glu Val

Ser Ala Pro Thr Glu Gln Gly Gln Asn Leu Gln Glu Asp Lys Val Met

Leu Glu Val Leu Val Ala Pro Ala Val Pro Ala Cys Glu Val Pro Thr 130 135 140

Ser Val Met Thr Gly Ser Val Val Glu Leu Arg Cys Gln Asp Lys Glu 145 150 155 160

Gly Asn Pro Ala Pro Glu Tyr Ile Trp Phe Lys Asp Gly Thr Ser Leu 165 170 175

BI

Leu Gly Asn Pro Lys Gly Gly Thr His Asn Asn Ser Ser Tyr Thr Asn 180 185 190

Glu His Glu Ser Gly Ile Leu Gln Phe Asn Met Ile Ser Lys Met Asp 195 200 205

Ser Gly Glu Tyr Tyr Cys Glu Ala Arg Asn Ser Val Gly His Arg Arg 210 215 220

Cys Pro Gly Lys Arg Met Gln Val Asp Val Leu Asn Ile Ser Gly Ile 225 230 235 240

Ile Ala Thr Val Val Val Val Ala Phe Val Ile Ser Val Cys Gly Leu 245 250 255

Gly Thr Cys Tyr Ala Gln Arg Lys Gly Tyr Phe Ser Lys Glu Thr Ser 260 265 270

Phe Gln Lys Gly Ser Pro Ala Ser Lys Val Thr Thr Met Gly Glu Asn 275 280 285

Asp Phe Arg His Thr Lys Ser Phe Ile Ile 290 295

<210> 15

<211> 310

<212> PRT

<213> Homo sapiens

<400> 15

Met Ala Leu Arg Arg Pro Pro Arg Leu Arg Leu Cys Ala Arg Leu Pro
1 5 10 15

Asp Phe Phe Leu Leu Leu Phe Arg Gly Cys Leu Ile Gly Ala Val 20 25 30

Asn Leu Lys Ser Ser Asn Arg Thr Pro Val Val Gln Glu Phe Glu Ser 35 40 45

Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr Ser Asp Pro Arg
50 55 60

Ile Glu Trp Lys Lys Ile Gln Asp Glu Gln Thr Thr Tyr Val Phe Phe 65 70 75 80

Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly Arg Ala Glu Ile Leu Gly 85 90 95

Lys Thr Ser Leu Lys Ile Trp Asn Val Thr Arg Arg Asp Ser Ala Leu 100 105 110

Tyr Arg Cys Glu Val Val Ala Arg Asn Asp Arg Lys Glu Ile Asp Glu 115 120 125

81

Ile Val Ile Glu Leu Thr Val Gln Val Lys Pro Val Thr Pro Val Cys 130 Arg Val Pro Lys Ala Val Pro Val Gly Lys Met Ala Thr Leu His Cys Gln Glu Ser Glu Gly His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn 170 Asp Val Pro Leu Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn 185 Ser Ser Phe His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala 200 Val His Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp Ala Gly Ser Ala Arg Cys Glu Glu Glu Glu Met Glu Val Tyr Asp Leu Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val Leu Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly Tyr Phe Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro Gly Lys Pro Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly Asp Phe Arg His Lys Ser Ser Phe Val Ile

<210> 16 <211> 212 <212> PRT <213> Homo sapiens

<400> 16

Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile Lys Asn Val Thr Arg
1 5 10 15

Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser Ala Pro Ala Glu Gln 20 25 30

Gly Gln Asn Leu Glu Asp Thr Val Thr Leu Glu Val Leu Val Ala Pro 35 40 45

Ala Val Pro Ser Cys Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val
50 55 60

Val Glu Leu Arg Cys Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu Tyr 65 70 75 80

Thr Trp Phe Lys Asp Gly Ile Arg Leu Leu Glu Asn Pro Arg Leu Gly Ser Gln Ser Thr Asn Ser Ser Tyr Thr Met Asn Thr Lys Thr Gly Thr 105 Leu Gln Phe Asn Thr Val Ser Lys Leu Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Ser Val Gly Tyr Arg Arg Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu Asn Ile Ser Gly Ile Ile Ala Ala Val Val 155 Val Ala Leu Val Ile Ser Val Cys Gly Leu Gly Val Cys Tyr Ala Gln 170 Arg Lys Gly Tyr Phe Ser Lys Glu Thr Ser Phe Gln Lys Ser Asn Ser 185 Ser Ser Lys Ala Thr Thr Met Ser Glu Asn Asp Phe Lys His Thr Lys 200 Ser Phe Ile Ile 210 <210> 17 <211> 1296 <212> DNA <213> Homo sapiens <400> 17 atggcgctga ggcggccacc gcgactccgg ctctgcgctc ggctgcctga cttcttcctg 60 ctgctgcttt tcaggggctg cctgataggg gctgtaaatc tcaaatccag caatcgaacc 120 ccagtggtac aggaatttga aagtgtggaa ctgtcttgca tcattacgga ttcgcagaca 180 agtgacccca ggatcgagtg gaagaaaatt caagatgaac aaaccacata tgtgtttttt 240 gacaacaaaa ttcagggaga cttggcgggt cgtgcagaaa tactggggaa gacatccctg 300 aagatetgga atgtgacacg gagagactca geeetttate getgtgaggt egttgetega 360 aatgaccgca aggaaattga tgagattgtg atcgagttaa ctgtgcaagt gaagccagtg 420 caggagagtg agggccaccc ccggcctcac tacagctggt atcgcaatga tgtaccactg 540 cccacggatt ccagagccaa tcccagattt cgcaattctt ctttccactt aaactctgaa 600 acaggcactt tggtgttcac tgctgttcac aaggacgact ctgggcagta ctactgcatt 660 gettecaatg acgeaggete agecaggtgt gaggageagg agatggaagt etatgacetg 720 aacattggcg gaattattgg gggggttctg gttgtccttg ctgtactggc cctgatcacg 780 ttgggcatct gctgtgcata cagacgtggc tacttcatca acaataaaca ggatggagaa 840 agttacaaga acccagggaa accagatgga gttaactaca tccgcactga cgaggagggc 900 gacttcagac acaagtcatc gtttgtgatc tgagacccgg gtgtggctga gagcgcacag 960 ageegeaegt geacataeet etgetagaaa eteetgteaa ggeagegaga getgatgeae 1020 tegacagage tagacaetet teaaagettt tegtttggea aggtgaceae taetetttta 1080 ctctacaagc ccatgaaaag agaaattttc tcaagaggac ccggaaatat aaccccaagg 1140 aaccaaactg ggtgcgttca ctgaggtggg gtccttaatt tgtttttggc ctgattccca 1200 tgaaaataag gggtctttaa gagtttggta cgtaaaaccc cccgcttggg ccttggaaac 1260

cacatgttta ccacctgcgt taaaaaaaaa aaaaaa

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<210> 18
<211> 6
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: sequence
       surrounding C-terminal cysteine of C2 domain
       (endothelial cell line t-end)
 <220>
 <221> MOD_RES
 <222> (4)
<223> Any amino acid
<400> 18
Tyr Arg Cys Xaa Ala Ser
  1
                  5
<210> 19
<211> 6
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: sequence
      surrounding the C-terminal cysteine of C2 domain
      (endothelial cell line t-end)
<220>
<221> MOD_RES
<222> (4)
<223> Any amino acid
<400> 19
Tyr Gln Cys Xaa Ala Ser
  1
<210> 20
<211> 6
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: sequence
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<220>
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<400> 20 Tyr Tyr Cys Xaa Ala Ser 1 5

<210> 21

<211> 300

<212> PRT

<213> Mus musculus

<400> 21

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Ser Met Ile Leu Gly Ser Leu Val Gln Gly Lys Gly Ser Val Tyr Thr 20 25 30

Ala Gln Ser Asp Val Gln Val Pro Glu Met Glu Ser Ile Lys Leu Thr 35 40 45

Cys Thr Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe Val 50 60

Gln Gly Ser Thr Thr Ala Leu Val Cys Tyr Asn Ser Gln Ile Thr Ala 65 70 75 80

Pro Tyr Ala Asp Arg Val Thr Phe Ser Ser Glu Gly Ile Thr Phe Ser 85 90 95

Ser Val Thr Arg Lys Asp Asn Gly Glu Tyr Thr Cys Met Val Ser Glu 100 105 110

Glu Gly Gly Gln Asn Tyr Gly Glu Val Ser Ile His Leu Thr Val Leu 115 120 125

Val Pro Pro Ser Lys Pro Thr Ile Ser Val Pro Ser Ser Val Thr Ile 130 135 140

Gly Asn Arg Ala Val Leu Thr Cys Ser Glu His Asp Gly Ser Pro Pro 145 150 155 160

Ser Glu Tyr Ser Trp Phe Lys Asp Gly Ile Ser Met Leu Thr Ala Asp 165 170 175

Ala Lys Lys Thr Arg Ala Phe His Asn Ser Ser Phe Thr Ile Asp Pro 180 185 190

Lys Ser Gly Asp Leu Tyr Phe Asp Phe Val Thr Ala Phe Asp Ser Gly
195 200 205

Glu Tyr Tyr Cys Gln Ala Gln Asn Gly Tyr Gly Thr Ala Met Arg Ser 210 215 220

Glu Ala Ala His Met Asp Ala Val Glu Leu Asn Val Gly Gly Ile Val 225 230 235 240

Ala Ala Val Leu Val Thr Leu Ile Leu Leu Gly Leu Leu Ile Phe Gly 245 250 255

b,

Val Trp Phe Ala Tyr Ser Arg Gly Tyr Phe Glu Thr Thr Lys Lys Gly 260 265 270

Thr Ala Pro Gly Lys Lys Val Ile Tyr Ser Gln Pro Ser Thr Arg Ser 275 280 285

Glu Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val 290 295 300

RI